

sheet, said second seal line being adjacent to a second end of the mesh sheet, which second end is opposed to said first seal line, said second seal line extending across the width of said bag, said first and second thermoplastic sheets extending together beyond the second end of the mesh sheet to lie against each other.

16. (Twice Amended) A bag for containing products, said bag comprising a central section and two end sections and having sealed side edges, said end sections each comprising sections of ^{Sealed} solid wall, thermoplastic sheeting sealed together } to provide a pair of facing bag walls and defining a bag interior, a central section of said bag comprising at least one plastic mesh sheet sealed to said end sections, said central section also defining a pair of facing walls, [sealed] joined at said side edges, at least one of said walls comprising said plastic mesh sheet to further define the bag interior, major portions of said end sections being spaced from said plastic mesh sheet, one of said end sections defining an unfolded pair of separate, flat, thermoplastic sheets.

REMARKS

Reconsideration of this application and allowance of the claims is respectfully requested.

The amendments to claims 1 and 16 are clearly believed to be proper, and supported by the original disclosure.

It is submitted that claims 16-20 should not be restricted from claims 1-15. The examiner has stated on page 2 of the last Office Action that one ground for the restriction lies in the fact that "...claims 16-18 and 20 do not require a solid wall thermoplastic sheet. . .". By amendment, claim 16 and its dependent claims now do require such solid wall thermoplastic sheeting.

Furthermore, the examiner states on page 2 that claim 16 and its dependent claims do not require the thermoplastic sheet to be sealed at the edges with the mesh sheet. The attention of the examiner is directed to lines 4 and 5 of claim 16, where it is stated "...at least one plastic

mesh sheet sealed to said end sections, said central section defining a pair of facing walls, joined at said side edges. . .”.

The examiner also states that claim 16 and its dependent claims “require a mesh sheet to be in a central section”. So does claim 1 by the language (line 8, et seq.) “. . .the mesh sheet being spaced from the first bag end. . .” and, “. . .said first and second thermoplastic sheets extending together beyond the second end of the mesh sheet to lie against each other.” Such language requires that the mesh sheet must be in a central section.

Accordingly, examination of claims 1, 16, and their dependent claims in this present application is requested.

The rejection under 35 U.S.C. 112 is believed to be dealt with by the amendment to claim 1, correcting the inadvertent clerical error.

Turning to the rejection of claims 1 and 2 as anticipated by Yamagata JP411130089A, interpretation A. The examiner goes through alleged similarities between Yamagata ‘089 and claim 1. However, some language of claim 1 is clearly missing from the disclosure of Yamagata.

In claim 1 (twice amended), line 9, “a second, separate thermoplastic sheet” is called for. This corresponds to sheet 32 in Fig. 2 of this application, where it can be plainly seen that sheet 32 is separate from and not a part of first thermoplastic sheet 16. In the examiner’s discussion on pages 3 and 4 of the Office Action, he identifies the second “thermoplastic sheet” as item 30 of Yamagata, namely the “header core material” within sections 10a of first thermoplastic sheet 2.

Note that if the second thermoplastic sheet is core material 30, that the following limitation of claim 1 is not met (beginning on line 8): “a second transverse seal line defined between and connecting together a second, separate thermoplastic sheet and the mesh sheet ...”

Header core material 30 and the mesh sheet are not connected together by any seal line at all! Rather, header core material 30 is enclosed in the header formed by the folded sheet portions 10a, which are then sealed together with seal lines 5c, in Yamagata '089.

Accordingly, it is submitted that Yamagata '089, under interpretation A, fails to teach the invention of claim 1.

Furthermore, the distinction between the invention of claim 1 and Yamagata '089 is significant. As described in the application and as previously discussed in this prosecution, the bags of claims 1 and 16 are capable of manufacture with conventional rollstock machines, where the rollers advance the bags being formed and the rollstock off of the roll by rollers that press against the ends of the bag which are spaced from the mesh sheeting. The mesh sheeting can be advanced by a simple roller at the end of the line, to provide a rapid, automated production of the bags of this invention with such conventional rollstock machines. A declaration on this point by the inventor can be provided if needed.

To the contrary, the inventor, Mr. Recchia, who works in this field, believes that conventional rollstock machines could not effectively manufacture bags of the Yamagata type without substantial and significant modification, if at all.

Accordingly, it is submitted that claims 1 and 2 are clearly not anticipated by Yamagata '089 and, furthermore, are not rendered obvious by the disclosure, under interpretation A.

Turning briefly to claim 16 in light of Yamagata '089, note how claim 16 requires two end sections which comprise sections of solid wall thermoplastic sheeting sealed together to provide a pair of facing bag walls, and "...major portions of said end sections being spaced from said plastic mesh sheet. . . "

Note that Yamagata Fig. 5, in the vicinity of reference numerals 8 and 9, shows a single sheet which may be folded over like an envelope, and which is not an end section "...defining an unfolded pair of separate, flat, thermoplastic sheets", as called for at the end of claim 16.

This structural difference has significance. As described before, the bag which is shown in Figs. 1 and 2 of this application and described in the claims is capable of being manufactured on substantially conventional rollstock equipment in which bags are manufactured from rolls of plastic material. The major modification required is to provide a roll of mesh sheeting along with the plastic sheeting, and appropriate seal bars to seal the mesh and other bag walls together. Such a bag may be filled, and then sealed with another, straight bar type seal 44, if desired, or conventionally sealed with a hog ring.

Thus, the bag of this invention exhibits simplicity of manufacture, being closeable with a simple seal rather than a more complex, envelope-type fold over as in Yamagata '089, which creates technical problems for automation.

Accordingly, it is submitted that claims 1 and 2 are patentable over Yamagata et al. '089.

The examiner has rejected claims 3, 4 and 6-8 as unpatentable over Yamagata et al. '089 in view of Meister U.S. Patent No. 3,024,962. It is submitted that this combination fails to remedy the deficiencies in the rejection based on Yamagata alone, as discussed above. The rejected claims all share in the patentable distinctions of claim 1.

The examiner has rejected claim 5 as unpatentable over Yamagata '089 further in view of Shigeta et al. Japanese Patent 407315391A. Here also, the patentable distinctions of claim 1 are shared by claim 5, rendering it patentable. Similarly in the case of claims 9-12, which are all dependent upon claim 1, it is submitted that they share in the patentable distinctions over

Yamagata '089A, so that the rejection of these claims under 35 U.S.C. 103(a) should be withdrawn.

Claims 13 and 14 have been rejected as unpatentable over Yamagata '089A further in view of Fox et al. 6,024,489 and Cammack 5,741,076. Here also, these claims share in the limitations of claim 1 and thus find patentable distinction over Yamagata. The same follows for the rejection of claim 15 as unpatentable over Yamagata '089A further in view of Welles U.S. 4,099,666, since claim 15 also shares in the limitations of claim 1.

The examiner has also rejected claims 1-4 as unpatentable over Yamagata '089A, interpretation B, in view of Yamagata Japanese Patent 200318776.

Turning to interpretation B, utilizing the language of claim 1, the first thermoplastic sheet remains as item 2, while the mesh sheet is item 3. However, by this interpretation, the second thermoplastic sheet is the resin tape 11, with the first and mesh sheets being sealed at their edges.

However, claim 1 of this application requires, at the end: “. . . said first and second thermoplastic sheets extending together beyond the second end of the mesh sheet to lie against each other.” Item 11 in Yamagata '089 clearly fails to be “extending. . . beyond the second end of the mesh sheet. . .”. Instead, the edge of the mesh sheet can be seen extending beyond tape 11 in Yamagata Fig. 5A.

On page 9, of the Office Action, the examiner agrees that Yamagata does not teach the first and second sheet extending beyond the mesh together. However, the examiner is urged to note that the major difference is that the second sheet does not extend beyond the mesh at all, together or otherwise!

At the bottom of page 9 of the Office Action, the examiner argues that Yamagata '776 teaches an alternative location of a sheet used to provide a means for securing a closure of a bag comprising a mesh sheet.

However, those skilled in the art would not be led to modify tape 11 in some manner disclosed by Yamagata '776, in part because tape 11 is just sticky tape, and not a functional part of the bag wall, as is the "third sheet" of claim 1. Tape 11 merely covers some of the mesh, which represents the bag wall, to provide a sticky portion for the fold over envelope-type seal that Yamagata '089 provides at the area of reference numerals 8, 9 and 11. Yamagata '776 also has a sticky member, pressure sensitive adhesive layer 5, to assist in sealing.

That is very different technology from what is shown in this application. The bag of Figs. 1 and 2 does not use pressure sensitive adhesive. Rather, it is sealed by seal line 44 (generally formed by heat sealing) or by a hog ring, etc. Accordingly, those skilled in the art would not be led by any combination of the Yamagata patents to see the bag as defined in claim 1 as obvious. Claim 1 does not call for any particular closure means at the upper end of first and second sheets 16, 32, although it is quite capable of being closed with a straight seal along line 44.

Thus, the bag of this invention has advantages and structure which are not taught or in any way rendered obvious by any combination of the two Yamagata patents, or any of the other patents cited by the examiner in the rejection.

The examiner then rejects dependent claims 5, 14, and 15 over Yamagata, interpretation B in view of various other references. These claims all share in the patentably distinct limitations of claim 1, and, as such, are also patentably distinct.

The examiner has rejected claims 1, 2, and 9-12 based on obviousness-type double patenting of claims 15-17 of Recchia Application No. 09/481,211 in view of Yamagata Japanese Application 411130089A. The Recchia Application No. 09/481,211 is allowed, and the issue fee has been paid.

Applicant's attorney agrees that the bag of claims 15-17 of Application 09/481,211 has similarity to the bag of this present invention at one end thereof, but it is quite different from this present invention at the other end thereof. This can be particularly illustrated in Figs. 2 and 3 of the '211 application, where header 30 is shown at one end, but a simple, straight seal of the mesh wall and the plastic sheet wall is present at the other end. Contrary to this, as shown at the top of Figs. 1 and 2 of this application, the first and second thermoplastic sheets 16, 32 extend beyond the mesh wall to form an open mouth for the bag that comprises plastic walls on both sides and is spaced from the mesh wall portion 12.

As previously stated, such a bag design can be manufactured with conventional roll stock machines, in which the rollers can roll on the double layers of thermoplastic sheeting found at each end of the bag. Other designs which are found in the prior art, and also the design of the '211 application, are not easily capable of manufacture with conventional roll stock machines. Likewise, Yamagata '089 appears not to be capable of easy manufacture using a conventional roll stock machine, because at one end 9 there is only a single layer of plastic sheeting 2 (excluding sticky tape 17 from consideration because it does not comprise part of the bag wall). The open mouth of the bag as shown in Fig. 5a of Yamagata '089 is at the line where the mesh sheeting ends, and then the projecting section 8 of sheeting 2 folds over in the manner of an envelope flap for closing.

On the bridging paragraph of pages 12 and 13 of the Office Action, the examiner identifies the second “thermoplastic sheet” as item 30, which is identified in the Yamagata specification as “. . .header core material 30 which consists of a synthetic-resin sheet . . . enclosed among the polymerization sections 10a and 10a. . .” (Paragraph 0030).

In the examiner’s interpretation on page 13 of the Office Action, the second seal is item 5c, furthest from item 30. However, the attention of the examiner is directed to claim 1 (twice amended) of this application, which calls for “. . . a second transverse seal line defined between and connecting together a second, separate thermoplastic sheet and the mesh sheet.” This second seal is clearly shown as seal 30, sealing second thermoplastic sheet 32 to the mesh sheet 12 adjacent end 34 “. . .so that second thermoplastic sheet 32 forms an extension of the bag wall which comprises mesh sheet 12, as particularly shown in Fig. 2.” (See page 4, lines 7-8 of the specification).

However, when one views Yamagata Figs. 5a and 5b, one can see that header core material 30 is enclosed within the header 29, and is clearly not connected by any sort of transverse seal line to the mesh sheet!

As stated above, this is not a small difference. The modifications of this invention make possible the mass production of such containers on substantially conventional roll stock machinery requiring just relatively minimal changes to include the mesh sheeting as one of the rolls of roll stock, and providing seal bars so that the appropriate straight seals between the mesh sheeting and the first and second thermoplastic sheets can be effected. Thus, while seals 5c of Yamagata are present, they do not perform the function of the second seal of this application, which is to provide a second, separate thermoplastic sheet which is attached at one end of the mesh sheet by the second seal.

Yamagata '089 also defines a first seal according to the examiner, which seals section 9 to section 11. This of course is a very different kind of seal. As stated in paragraph 0019 of Yamagata '089, section 9 "...consists of the adhesives layer 16 and the sublation tape 17 which covers this adhesives layer 16". This first seal is basically a sticky layer, which attaches to the sticky layer of tape 11. This is quite contrary to what is intended as the "first seal" as defined in claim 1 of this application, in which a first seal line joins one of the first end wall portions to the mesh sheet. See first seal line 20 in the drawings of this application.

Accordingly, it is submitted to be clear that the invention of claims 1 and its dependent claims 2 and 9-12 cannot be rendered obvious by any combination of the '211 application and Yamagata '089, or the claims thereof. What is missing from the '211 disclosure and claims is the upper end of the bag defined by the first and second sheets 16, 32. There is no hint of it in Figs. 2 and 3 of the '211 application. Yamagata fails to show such a structure also at its open mouth, in the vicinity of reference numeral 8. Instead, all that is shown is a single, fold over sheet with a bit of tape that is removed to expose a sticky layer 16, which sticks to double-sided sticky tape 11.

The examiner has rejected various of the claims dependent upon claim 1 based on obviousness-type double patenting in view of the '211 application, in combination with Yamagata '089 and various other references. Each of these rejected claims, being ultimately dependent upon claim 1, share in the distinguishing limitations of claim 1 over the '211 reference, Yamagata '089, and the other references. These dependent claims share in the claim 1 distinguishing limitations, and thus have patentable distinction in their own right over the various combinations of references, which all fail to address the specific, patentable distinctions discussed above with respect to claim 1.

In view of the above, allowance of the claims is respectfully requested.

Respectfully submitted,

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